



Massachusetts

State Police Academy

Professional Development Series

Traffic Crash

Reconstruction

Course Description: ***THIRD IN A SERIES OF THREE COURSES***

Traffic Crash Reconstruction builds upon IPTM's *Advanced Traffic Crash Investigation* course by assisting you further in understanding vehicle dynamics. You will take part in a more intense study of time/distance calculations, angular momentum and impact speed calculations using momentum equations.

Topics include:

- Derivation and origin of the commonly used speed formulas
- Speed of vehicles at impact using conservation of linear momentum
- Behavior of vehicles in a collision using Newton's three laws of motion
- Discussions of commercial vehicle and motorcycle dynamics in collisions
- The determination of direction of travel, initial contact and position of vehicles on the roadway

This course includes extensive project work and controlled vehicle experiments to give you first hand experience in crash reconstruction. Each student will be required to diagram and analyze three different crash scenarios as well as complete vector sum analysis of each. Prerequisite: Because of the highly technical subject matter, it is mandatory for you to have successfully completed IPTM's *Advanced Traffic Crash Investigation* (80 hours) course or its equivalent.

Dates and Location: M-F March 31, thru April 11, 2008 @ 0800 hrs. 1700 hrs. at the Massachusetts State Police Academy

Who Should Attend: Municipal, Campus and State Police Personnel

Registration Information: Contact IPTM Institute of Police Technology and Management @ (904)620-4786 or register online at <http://www.iptm.org/Schedule.aspx>

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